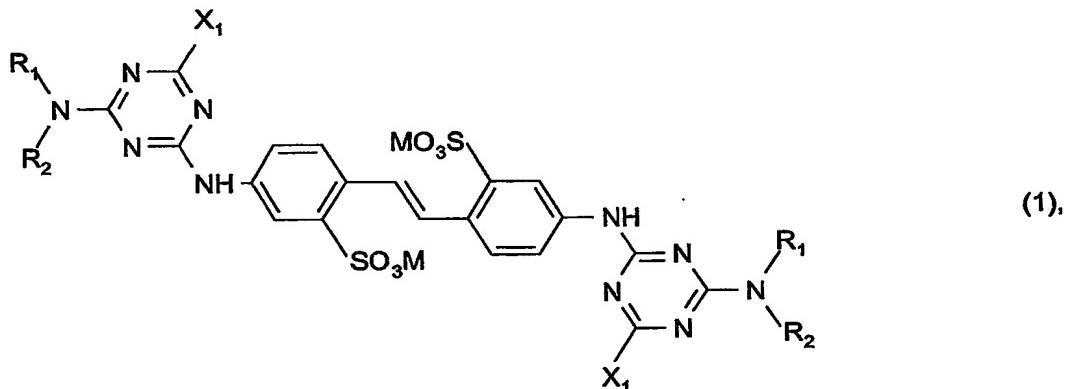


Claims

1. A whitening pigment comprising the reaction product of
 (a) a melamine-formaldehyde and/or a melamine—urea polycondensation product and
 5 (b) a water-soluble fluorescent whitening agent of the formula



- wherein each of the two
 R₁ groups, independent of the other, represents a C₁-C₆alkyl or C₁-C₄alkyl-O-C₁-C₄alkyl
 10 residue, which is substituted by one or two -CONH₂, -CONHC₁-C₄alkyl, -COOH, -SO₂NH₂,
 -SO₂NHC₁-C₄alkyl or -NH₂ groups, each of the two
 R₂ groups, independent of the other, represents hydrogen, C₁-C₄alkyl, C₂-C₄hydroxyalkyl or
 C₁-C₄alkoxyC₁-C₄alkyl, or
 R₁ and R₂ together with the nitrogen atom complete a piperazine ring, each of the two
 15 X₁ groups, independently, represent -OH, -OC₁-C₄alkyl, -Oaryl or the group -NR₃R₄, wherein
 R₃ and R₄ each, independently, represent hydrogen, C₁-C₄alkyl, C₂-C₄hydroxyalkyl,
 C₁-C₄alkoxyC₁-C₄alkyl, a phenyl, phenyl mono- or disulphonic acid residue or,
 R₃ and R₄, together with the nitrogen atom to which they are attached, complete a
 morpholino, piperidino or pyrrolidino ring or, alternatively,
 20 X₁ represents an amino acid residue from which a hydrogen atom has been abstracted from
 the amino group and
 M is hydrogen, an alkaline or alkaline earth metal ion, ammonium, mono- di-, tri- or tetra-
 substituted C₁-C₄alkylammonium or C₂-C₄hydroxyalkylammonium or mixtures thereof.
 25 2. A whitening pigment according to claim 1, wherein the component
 (a) is a melamine-formaldehyde polycondensation product.

3. A whitening pigment according to claims 1 or 2, wherein, in the compound of formula (1), each of the two R₁ groups, each of the two R₂ groups and each of the two X₁ groups are the same.
- 5 4. A whitening pigment according to any one of claims 1 to 3, wherein, in the compound of formula (1),
R₁ represents a C₁-C₄alkyl residue, which is substituted by one -CONH₂ or -CONHC₁-C₄alkyl group.
- 10 5. A whitening pigment according to any one of claims 1 to 4, wherein, in the compound of formula (1),
R₂ represents hydrogen, C₁-C₄alkyl or C₂-C₄hydroxyalkyl.
- 15 6. A whitening pigment according to any one of claims 1 to 5, wherein, in the compound of formula (1),
X₁ represents the group -NR₃R₄, wherein
R₃ represents hydrogen, C₁-C₄alkyl, C₂-C₄hydroxyalkyl, C₁-C₄alkoxyC₁-C₄alkyl, a phenyl, phenyl mono- or disulphonic acid residue,
R₄ represents hydrogen C₁-C₄alkyl or C₂-C₄hydroxyalkyl or,
20 R₃ and R₄, together with the nitrogen atom to which they are attached, complete a morpholino ring or, alternatively,
X₁ represents an amino acid residue from which a nitrogen atom has been abstracted from the amino group.
- 25 7. A whitening pigment according to any one of the preceding claims, wherein, in the compound of formula (1),
M represents hydrogen, sodium or potassium.
- 30 8. A process for the preparation of whitening pigment according to claim 1, whereby the melamine-formaldehyde or melamine-urea polycondensation product is reacted with a fluorescent whitening agent of formula (1) in aqueous medium, in the presence of mineral acid, and subsequently treated with base.

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9. Use of the whitening pigment composition, according to any one of claims 1 to 7, for the fluorescent whitening of paper.

10. A paper coating composition comprising, in addition to 0.01 to 10 parts by weight of the
5 whitening pigment according to claim 1, per 100 parts of inorganic pigment,

- (i) from 3 to 25 parts by weight of binder and co-binder,
- (ii) 0 to 1 part by weight of rheology modifier and
- (iii) 0 to 2 parts by weight of wet-strength agent.

10 11. Use of the coating composition according to claim 10, for the fluorescent whitening of paper.

12. Paper which has been treated with whitening pigment composition according to claim 9 or a coating composition, according to claim 10.

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